

SAN DIEGO
MESA COLLEGE



Program Review

Summary and Reflections with Unit Goals, Action Plans, and Updates

Instructional Program - Geography (GEOG)

Executive Summary

Describe the successes and challenges your unit has faced since the last comprehensive review.

Since the last comprehensive review, successes include:

- Completion of an EquityEdit faculty interest group (FIG) with three geography faculty members (one contract and two part-time).
- Completion of the Teaching Research for Equity and Excellence (TREE) FIG with one geography faculty member. (in collaboration with faculty from sociology and biology).
- Publication of an OER physical geography lab manual (co-authored by the contract geographer).
- Funding for an OER world regional geography textbook (co-authored by a Mesa faculty member) and an OER physical geography lab manual for online instructions (co-authored by contract and part-time faculty members).
- Involvement in five grant applications to provide funding for Mesa student research internships; three of which were successful:
 - Encoding Geography (\$140,000 subaward from the American Association of Geographers funded by the National Science Foundation) in partnership with Mesa's geographic information systems (GIS) department,
 - Sustainable Food Futures (\$98,201 subaward from the San Diego State University Research Foundation funded by the U.S. Department of Agriculture), and
 - International Research Internship Program (\$2,500 direct student payment from UCSD's International Institute).
- Co-hosting professional learning workshops on science identities and geoscience careers with faculty members in geography and geology.

Since the last comprehensive review, challenges include:

- 50% loss of contract faculty due to retirement.
- 48% loss of course sections scheduled each semester even though the program's productivity values exceed campus-wide targets.
- Persistent equity gaps.

If applicable, describe any major curricular or service changes your unit has engaged in and the impact of those changes since the last comprehensive review.

In 2021, CSU San Marcos began offering a bachelor's degree in geography. Two of four preparation for the major courses have been articulated so far.

In collaboration with the contract geography at City College, scheduled six-year reviews for GEOG 102 (effective term Spring 2020), GEOG 104 (effective term Fall 2021), GEOG 101, GEOG 101L, and GEOG 154 (effective term Fall 2023) were completed.

The physical geography lab course (GEOG 101L) was submitted for non-emergency distance education instruction in Spring 2023.

Summary and Reflection

If applicable, describe the impact of any new resources (human, fiscal, etc) on the unit and/or action plan implementation.

n/a

If you assess **OUTCOMES**, please confirm that the outcomes have been reviewed for accuracy. If you do not assess Outcomes, skip this question.

Reviewed & Accurate

Related Documents for Charts and Graphs

Executive Summary Complete

Yes

Data Reflection

Trends observed in program/service area's data.

The following trends in instructional data have been observed:

- Slight improvements in reducing equity gaps in course success and retention rates, although there are still persistent and considerable gaps.
- Enrollment has declined since the pandemic.

Describe any equity gaps in the data. Are there differences and/or patterns observed by demographics (e.g.race/ethnicity, gender, age, etc.)

There are persistent equity gaps in the geography program. The five-year average of course success is 70.9% and the equity gaps are as follows: Black/African American (16%), Latinx (7%), and first-generation status (6.8%). Similar equity gaps exist for course retention.

Describe the discussion(s) that took place about the unit's learning outcomes assessment data.

Each semester, the geography program discusses the course and program learning outcomes assessment data. At the course level, students are meeting the minimum threshold set by the social sciences department.

Related Documents for Charts and Graphs

Data Reflection Complete

Yes

Practice Reflection

Describe current practices your program/service area has engaged in that you believe impact the above data trends and equity gaps.

Professional learning is a focus of reducing equity gaps in geography classes. Recent opportunities completed by geography faculty include:

- Unlearning Racism in the Geosciences, which included the co-authorship of the Guidelines to be Actively Anti-Racist in the Geosciences at Two-Year Colleges.
- Supporting and Advancing Geoscience Education at Two-Year Colleges change agent program with faculty in the geology program.
- EquityEdit faculty interest group.
- Introducing Geophysics for Urban and Near-surface Applications NSF-workshop, which had the goal to attract a diverse population of students to geophysics through the development of teaching materials that highlight the application of geophysical tools and methods to societally-relevant questions, including environmental, engineering, and forensic questions in urban settings.

Summary and Reflection

- Workshops with geography and geology faculty on creating inclusive field experiences, professional opportunities in the geosciences, and cultivating students' science identities.

What other factors (internal or external) might also impact the above data trends and equity gaps?

It is unclear what internal or external factors directly influence data trends and equity gaps. Hiring a physical geographer with professional experience in teaching culturally-affirming curricula would be a step towards eliminating equity gaps.

Related Documents for Charts and Graphs

Practice Reflection Complete

Yes

Mid-Cycle Updates

Are there any edits or updates to the Executive Summary above?

2023-2024 Update:

Since the last comprehensive review, successes include:

- Approval for a physical geography faculty hire, who will start in Fall 2024.
- Lottery funds approval to purchase qPCR and seismic refraction equipment in Fall 2023 for use in the physical geography laboratory course and for student research projects.
- Delivery of two asynchronous physical geography laboratory courses in Fall 2023 with the District ZTC grant-funded lab manual. The implementation of the course has been positive thus far in terms of student learning, however student success rates and evaluations will need to be evaluated at the end of the term.
- In partnership with Garden 31, Mesa College was awarded a \$125,000 grant from the San Diego Foundation to increase students' food security and food sovereignty at the TerraMesa Community Garden.

Since the last comprehensive review, challenges include:

- Ensuring that course modalities match student needs.
- Persistent equity gaps.

In 2021, CSU San Marcos began offering a bachelor's degree in geography. Three of four preparation for the major courses have been articulated so far.

In Fall 2023, two new courses are being proposed: GEOG 170, Sustainable Places and Practices; and GEOG 205, Critical Thinking and Writing in Geography.

In Fall 2023, the first honors section of cultural geography (GEOG 102) was offered.

Are there any edits or updates to the Data Reflection above?

2023-2024 Updates:

There have been slight improvements in reducing equity gaps in course success and retention rates, although there are still persistent and considerable gaps.

There are persistent equity gaps in the geography program. The five-year average of course success is 71.4% and the equity gaps are as follows: Black/African American (15%), Latinx (7%), and first-generation status (4%). Similar equity gaps exist for course retention.

Summary and Reflection

Each semester, the geography program discusses the course and program learning outcomes assessment data. At the course level, students are meeting the minimum threshold set by the social sciences department.

Are there any edits or updates to the Practice Reflection above?

2023-2024 Updates:

Professional learning is a focus of reducing equity gaps in geography classes. Recent opportunities completed by geography faculty include:

- Unlearning Racism in the Geosciences, which included the co-authorship of the Guidelines to be Actively Anti-Racist in the Geosciences at Two-Year Colleges.
- Supporting and Advancing Geoscience Education at Two-Year Colleges change agent program with faculty in the geology program.
- EquityEdit faculty interest group.
- Introducing Geophysics for Urban and Near-surface Applications NSF-workshop, which had the goal to attract a diverse population of students to geophysics through the development of teaching materials that highlight the application of geophysical tools and methods to societally-relevant questions, including environmental, engineering, and forensic questions in urban settings.
- Workshops with geography and geology faculty on creating inclusive field experiences, professional opportunities in the geosciences, and cultivating students' science identities.

It is unclear what internal or external factors directly influence data trends and equity gaps. Hiring a physical geographer with professional experience in teaching culturally-affirming curricula is a step towards eliminating equity gaps.

Summary and Reflection

Goal 1: Implement the recommendations of the Supporting and Advancing Geoscience Education at Two-Year Colleges program of the Science Education Resource Center to reduce equity gaps.

Unit Goal: Goal 1: Implement the recommendations of the Supporting and Advancing Geoscience Education at Two-Year Colleges program of the Science Education Resource Center to reduce equity gaps.

Goal Status: Active

Beginning Year: 2022 - 2023

Projected Completion Year: 2025 - 2026

Mapping

Mesa College Strategic Plan: Roadmap to Mesa2030: (X - Highlight the X to Align)

- Community - Objective 1: X
- Community - Objective 2: X
- Community - Objective 3: X
- Community - Objective 4: X
- Community - Objective 5: X
- Completion - Objective 1: X
- Completion - Objective 2: X
- Completion - Objective 3: X
- Completion - Objective 4: X
- Pathways and Partnerships - Objective 1: X
- Pathways and Partnerships - Objective 2: X
- Pathways and Partnerships - Objective 3: X
- Pathways and Partnerships - Objective 4: X
- Pathways and Partnerships - Objective 5: X
- Scholarship - Objective 1: X
- Scholarship - Objective 2: X
- Scholarship - Objective 3: X
- Scholarship - Objective 4: X
- Scholarship - Objective 5: X

Action Plans	Action Plan Update
<p>Action Plan Status: Active</p> <p>Action Plan: Meet with geography faculty in Spring 2024 to discuss the recommendations and develop an implementation strategy.</p> <p>Action Plan Cycle: 2023 - 2024</p>	

Summary and Reflection

Goal 2: Modernize the physical geography laboratory.

Unit Goal: Goal 2: Modernize the physical geography laboratory.

Goal Status: Active

Beginning Year: 2022 - 2023

Projected Completion Year: 2025 - 2026

Mapping

Mesa College Strategic Plan: Roadmap to Mesa2030: (X - Highlight the X to Align)

- Community - Objective 1: X
- Community - Objective 2: X
- Community - Objective 3: X
- Community - Objective 4: X
- Community - Objective 5: X
- Completion - Objective 1: X
- Completion - Objective 2: X
- Completion - Objective 3: X
- Completion - Objective 4: X
- Pathways and Partnerships - Objective 1: X
- Pathways and Partnerships - Objective 2: X
- Pathways and Partnerships - Objective 3: X
- Pathways and Partnerships - Objective 4: X
- Pathways and Partnerships - Objective 5: X
- Scholarship - Objective 1: X
- Scholarship - Objective 2: X
- Scholarship - Objective 3: X
- Scholarship - Objective 4: X
- Scholarship - Objective 5: X

Action Plans	Action Plan Update
Action Plan Status: Completed Action Plan: Request lottery funds for qPCR and seismic refraction equipment. Action Plan Cycle: 2023 - 2024	
Action Plan Status: Active Action Plan: Identify what resources are needed to provide students with experience using appropriate technologies and equipment. Action Plan Cycle: 2023 - 2024	

Summary and Reflection

Goal 3: Develop the sustainable places and practices course.

Unit Goal: Goal 3: Develop the sustainable places and practices course.

Goal Status: Completed

Beginning Year: 2022 - 2023

Projected Completion Year: 2023 - 2024

Mapping

Mesa College Strategic Plan: Roadmap to Mesa2030: (X - Highlight the X to Align)

- Pathways and Partnerships - Objective 1: X
- Pathways and Partnerships - Objective 2: X
- Pathways and Partnerships - Objective 3: X
- Pathways and Partnerships - Objective 4: X
- Pathways and Partnerships - Objective 5: X
- Scholarship - Objective 1: X
- Scholarship - Objective 2: X
- Scholarship - Objective 3: X
- Scholarship - Objective 4: X
- Scholarship - Objective 5: X
- Stewardship - Objective 1: X
- Stewardship - Objective 2: X
- Stewardship - Objective 3: X
- Stewardship - Objective 4: X
- Stewardship - Objective 5: X
- Stewardship - Objective 6: X

Action Plans	Action Plan Update
<p>Action Plan Status: Completed</p> <p>Action Plan: 1. Review the course syllabus from SDSU. 2. Draft a course outline and discuss with District colleagues. 3. Submit course for state and articulation approval.</p> <p>Action Plan Cycle: 2023 - 2024</p>	

Goal 4: Increase hands-on and field experiences in geography courses.

Unit Goal: Goal 4: Increase hands-on and field experiences in geography courses.

Goal Status: Active

Summary and Reflection

Beginning Year: 2022 - 2023

Projected Completion Year: 2025 - 2026

Mapping

Mesa College Strategic Plan: Roadmap to Mesa2030: (X - Highlight the X to Align)

- Community - Objective 1: X
- Community - Objective 2: X
- Community - Objective 3: X
- Community - Objective 4: X
- Community - Objective 5: X
- Completion - Objective 1: X
- Completion - Objective 2: X
- Completion - Objective 3: X
- Completion - Objective 4: X
- Pathways and Partnerships - Objective 1: X
- Pathways and Partnerships - Objective 2: X
- Pathways and Partnerships - Objective 3: X
- Pathways and Partnerships - Objective 4: X
- Pathways and Partnerships - Objective 5: X
- Scholarship - Objective 1: X
- Scholarship - Objective 2: X
- Scholarship - Objective 3: X
- Scholarship - Objective 4: X
- Scholarship - Objective 5: X
- Stewardship - Objective 1: X
- Stewardship - Objective 2: X
- Stewardship - Objective 3: X
- Stewardship - Objective 4: X
- Stewardship - Objective 5: X
- Stewardship - Objective 6: X

Action Plans	Action Plan Update
Action Plan Status: Active Action Plan: Identify current and potential hands-on and field experiences. Action Plan Cycle: 2022 - 2023	

Goal 5: Publish an OER physical geography lab manual designed for asynchronous instruction.

Unit Goal: Goal 5: Publish an OER physical geography lab manual designed for asynchronous instruction.

Summary and Reflection

Goal Status: Completed

Beginning Year: 2022 - 2023

Projected Completion Year: 2023 - 2024

Mapping

Mesa College Strategic Plan: Roadmap to Mesa2030: (X - Highlight the X to Align)

- Completion - Objective 1: X
- Completion - Objective 2: X
- Completion - Objective 3: X
- Completion - Objective 4: X
- Scholarship - Objective 1: X
- Scholarship - Objective 2: X
- Scholarship - Objective 3: X
- Scholarship - Objective 4: X
- Scholarship - Objective 5: X

Action Plans	Action Plan Update
<p>Action Plan Status: Completed</p> <p>Action Plan: 1. Co-author lab manual for review. 2. Send lab manual draft for review. 3. Beta-test lab manual 4. Publish lab manual.</p> <p>Action Plan Cycle: 2023 - 2024</p>	

Goal 6: Formalize mentoring opportunities for majors in geography and related disciplines.

Unit Goal: Goal 6: Formalize mentoring opportunities for majors in geography and related disciplines.

Goal Status: Active

Beginning Year: 2022 - 2023

Projected Completion Year: 2025 - 2026

Mapping

Mesa College Strategic Plan: Roadmap to Mesa2030: (X - Highlight the X to Align)

- Community - Objective 1: X
- Community - Objective 2: X
- Community - Objective 3: X
- Community - Objective 4: X
- Community - Objective 5: X
- Completion - Objective 1: X
- Completion - Objective 2: X
- Completion - Objective 3: X

Summary and Reflection

- Completion - Objective 4: X
- Pathways and Partnerships - Objective 1: X
- Pathways and Partnerships - Objective 2: X
- Pathways and Partnerships - Objective 3: X
- Pathways and Partnerships - Objective 4: X
- Pathways and Partnerships - Objective 5: X
- Scholarship - Objective 1: X
- Scholarship - Objective 2: X
- Scholarship - Objective 3: X
- Scholarship - Objective 4: X
- Scholarship - Objective 5: X

Action Plans	Action Plan Update
<p>Action Plan Status: Completed</p> <p>Action Plan: Plan a visit to the geography department at SDSU for Fall 2023.</p> <p>Action Plan Cycle: 2023 - 2024</p>	
<p>Action Plan Status: Active</p> <p>Action Plan: Identify what activities would best support geography majors.</p> <p>Action Plan Cycle: 2023 - 2024</p>	

Goal 7: Develop Garden-related Curricula

Unit Goal: Develop garden and food system-related curricula for the TerraMesa Community Garden.

Goal Status: Active

Beginning Year: 2022 - 2023

Projected Completion Year: 2024 - 2025

Mapping

Mesa College Strategic Plan: Roadmap to Mesa2030: (X - Highlight the X to Align)

- Community - Objective 2: X
- Pathways and Partnerships - Objective 3: X
- Scholarship - Objective 1: X
- Scholarship - Objective 2: X
- Scholarship - Objective 4: X
- Stewardship - Objective 1: X
- Stewardship - Objective 2: X

Summary and Reflection

Action Plans	Action Plan Update
Action Plan Status: Active Action Plan: Develop curricula as part of the Strengthening Our Roots grant. Action Plan Cycle: 2023 - 2024	